

Dakota FARMER



DM&E project not dead yet
See Page 4



Everything's big in this shop
See Page 24

The mythbuster

Key Points

- Crop production myths can lead to management mistakes.
- Drying out soil doesn't make corn roots go deeper.
- No-till doesn't mean you'll have more weed pressure.

By **LON TONNESON**

JOHN McGillicuddy stood under a bright sun near Fargo, N.D., last September and held a five-leaf corn plant upside down so that farmers gathered around him could see the roots.

"How many of you have heard that corn roots will grow down through dry soil to moisture?" asked McGillicuddy, an independent Corn Belt crop consultant.

Many nodded yes.

"If I ever find the son-of-a-gun who has been telling farmers that, I'm going to kill him," McGillicuddy said. "It's a myth. Corn roots grow with moisture, not to moisture. It is important to keep the crown surrounded by moist soil from emergence through about V7 [vegetative growth stage 7]."

McGillicuddy made his point during Peterson Farms Seed's "Mythbuster" field day last September. The farmer-owned seed company at Harwood, N.D., modeled the field day after the Discovery Channel's "Mythbuster" TV show.

To continue the theme, we asked others to bust some myths about crop production in the Dakotas.

■ **Myth: No-till means more weeds.**

Mythbuster: That's not the case with low-disturbance no-till systems, especially with a diverse crop rotation, says Dwayne Beck, manager, Dakota



CONFRONTING MYTHS: Herman Rabanus (right) and Eric Flesberg, both of Harwood, N.D., check out a corn plant's roots at Peterson Farms Seed's "Mythbuster" field day last summer.

Lakes Research Farm, Pierre, S.D. "The key is using both low-disturbance [disk openers only with no harrowing or coulters] and diverse rota-

tion," he says. In a recent trial, USDA researchers counted weeds in low-disturbance no-till and a rotational tillage scheme with one light tillage operation

during every rotation cycle. The "poor" rotation alternated cool- and warm-season crops. With tillage, it produced 225 weeds per square meter. Under

no-till, the same rotation pattern had 94 weeds per square meter. A rotation that had two cool-season crops followed by two warm-season crops produced 44 weeds per square meter when tillage was used and seven weeds per square meter under low-disturbance no-till. The difference between the high-disturbance/poor rotation system and the low-disturbance/good rotation system was a 97% reduction in weed pressure.

■ **Myth: Manure is a better source of crop nutrients than commercial fertilizer.**

Mythbuster: Not true, says Jim Gerwing, South Dakota State University Extension soil specialist. Plants can only take up inorganic nutrients. Manure has to be broken down first. When the soil is cool, the breakdown occurs slowly. However, the increased microbial activity that occurs in manure can improve soil tilth, which may make it appear that manure is a better source of nutrients.

■ **Myth: Weeds are getting harder to kill with glyphosate.**

Mythbuster: Some weeds may be harder to control, but not all, says Richard Zollinger, North Dakota State University Extension weed specialist. Part of the problem, as some farmers contend, is that growers may be buying the myth about glyphosate. Often companies advertise that glyphosate is a convenient way to control weeds. But careful scouting, weed identification, herbicide selection and application timing are still required for best results, Zollinger says.

More mythbusting on Page 8.

Powerful Performance

